

AMENDMENT TO THE CLAIMS:

1. [Canceled] A method for testing a petroleum product produced during refining to classify said product, said method comprising the steps of:

- a) obtaining and preparing a representative sample of said product;
- b) forming a digital image of said sample with a scanner; and
- c) processing said digital image by extracting and filtering said digital image to produce a representative lustre measurement of said sample.

2. [Currently Amended] ~~A method for testing as recited in Claim 1~~ A method for testing a petroleum product produced during refining to classify said product, said method comprising the steps of:

- a) obtaining and preparing a representative sample of said product;
- b) forming a digital image of said sample with a scanner; and
- c) processing said digital image by extracting and filtering said digital image to produce a representative lustre measurement of said sample wherein said steps b) and c) are iterated a plurality of times and including the additional step of totaling said representative lustre measurement of said sample produced during each of said iterations and then averaging said total to obtain an average lustre measurement of said sample; and

d) further including the step of comparing said average lustre measurement to established parameters to assign a coefficient of thermal expansion (CTE) value to said sample to determine the CTE of said product, given historical correlation between CTE and lustre measurements.

3. [Currently Amended] A method for testing as recited in Claim 1 2 wherein said step b) of forming a digital image of said sample with a scanner includes the steps of placing said sample in a cylinder having a translucent end, placing said translucent end on a glass plate of said scanner, and blocking said plate.
4. [Canceled] A method of testing as recited in Claim 2 further including the step of comparing said average lustre measurement to established parameters to assign a coefficient of thermal expansion (CTE) value to said sample to determine the CTE of said product, given historical correlation between CTE and lustre measurements.
5. [Currently Amended] A method of testing as recited in Claim 1 2 further including the step of repeating all previous steps for successive samples and designating each sample as to low or high CTE.
6. [Currently Amended] A method of testing as recited in Claim 1 2 further including the step of varying known operating parameters during petroleum refining to alter said lustre measurement of said sample in order to obtain a product with a desirable CTE.
7. [Original] A method for testing a petroleum product in particle form to classify said product, said method comprising the steps of:
 - a) placing a sample of said particles next to a calibrated optical density scale on a scanner;

scanner;

- b) using said scanner to produce a visible reflection image of light from said sample particles and said optical density scale;
- c) creating a calibration curve of optical density versus gray scale using the optical density scale image; and
- d) determining the average gray scale value of the sample image and converting it to optical density using said calibration curve.

8. [Original] A method for testing as recited in Claim 7 wherein step (a) includes the steps of placing said sample of particles in a container having at least one transparent side, and placing said transparent side on said scanner next to said calibrated optical density scale.

9. [Currently Amended] A method as set forth in Claim 7 including the additional step of repeating steps a) through e d) a plurality of times to obtain an average lustre measurement.

10. [Currently Amended] A method as set forth in Claim 7 including the additional step of comparing ~~said intensity measurement~~ said optical density determined in step d) against established parameters.

11. [Currently Amended] A method for testing as set forth in Claim 7 ~~9~~ including the step of varying known operating parameters during petroleum refining to alter said lustre measurement of said sample in order to obtain a product with a desirable CTE.